

# **METROPOLITAN PROVIDENCE BICYCLE FACILITIES SITE ASSESSMENT PROJECT**

## **SOUTH ELMWOOD BIKE PATH**

**Cranston, RI**



**FINAL DESIGN STUDY REPORT**  
April 25, 2005

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## OVERVIEW

### **Introduction**

The Rhode Island Department of Transportation (RIDOT) has retained Pare Engineering Corporation (PARE) to study and develop the creation of a proposed Shared Use Path facility along the inactive existing Warwick Industrial Track (South Elmwood) located in Cranston, Rhode Island.

The total area of the proposed Shared Use Path for the Warwick Industrial Track project is shown on Figure 1, the Overall Site Plan. To further highlight details of the existing conditions for the proposed Shared Use Path, the South Elmwood section of the project has been divided into three segment sections as shown on Figure 2, the Segment Location Plan.

The following text is organized according to the area covered by each of the three segments. The segments, as indicated on the maps, are described, with its existing conditions evaluated, and constraints identified, as they relate to the most appropriate location of the Shared Use Path. In conjunction with existing conditions, other pertinent criteria such as intersections, roadway crossings, adjacent properties, and other facilities were examined with the bicyclist's needs in mind to determine the most appropriate design alternative.

Considered in this report are the conclusions that were made in regards to the *2002 Bicycle Transportation User Survey; Developing Intermodal Connections to the 21<sup>st</sup> Century*. RIDOT, in conjunction with the University of Rhode Island Transportation Center (URITC), has developed and provided a comprehensive bicycle user's survey to the community. The received and compiled questionnaire responses provide valuable statistical information relative to the future planning of the statewide bicycle program. This information identifies key insights into the factors that encourage and/or discourage bicycle use as an alternative travel mode in Rhode Island. The survey data information gathered under this research project also provides a useful tool in justifying the continued future expansion of a transportation infrastructure that truly accommodates a multi-modal system. Analysis obtained from this research helps establish a baseline for future RIDOT bicycle project planning and design. Transportation planners and engineers will have accurate, readily available commuting and recreational related findings as a result of this project. Additional information pertaining to this project is available on the URITC's website, [www.uritc.uri.edu/research](http://www.uritc.uri.edu/research).



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The Providence & Worcester Railroad Company Line (P&W) currently has ownership of the South Elmwood Rail Line from Mill Street to the AMTRAK northeast corridor. It continues in a northerly direction into Cranston for approximately 1½ miles from the Ciba-Geigy property to the active AMTRAK Rail Line, where it connects to the Pontiac Secondary Rail Line. Ciba-Geigy has purchased the rail's right-of-way east from Mill Street to the pedestrian and rail bridge that crosses the Pawtucket River.

The South Elmwood Bike Path runs through diverse areas including forests and fields, as well as residential, commercial, and industrial areas, and historical and special interest districts.

Recreational sites that are located in the vicinity of the rail corridor include Fay Memorial Field, Pawtuxet State Park, Belmont Park, and Roger Williams Park. Several improved and unimproved walking trails are located throughout the South Elmwood section. They are along Park View Boulevard and within Belmont Park and Fay Field. There are also canoe and trail access points along the Pawtuxet River. For additional location information on these sites, refer to the individual Segment Plans.

The trail is generally dry, relatively flat, and appears to be well drained. There are areas where the former railroad bed crosses through or over wetlands. Located just south of and generally following the rail line is the Pawtuxet River. It flows through a total of five communities in central Rhode Island. As it relates to this project, the River's boundaries through Cranston and Warwick are east to west, the East Natick Village, and the Pawtuxet Cove. The main tributary entering the Pawtuxet River in this area is the Pocasset River. The Environmental Permitting section outlines the location of the wetlands and associated potential impacts for each of the three segments.

There are historical sites to be found in this area. Referring to the Fall 1993 Final Report, "*The Pawtuxet River Corridor Study*", conducted by the University of Rhode Island, Graduate Curriculum in Community Planning and Area Development, the Ciba-Geigy Pedestrian and Rail Bridges sites are listed as being registered with local, state, and/or federal historical registries.

The protection, preservation, and reuse of these cultural resources along the River should be carefully considered in the future plans for the development of the path.



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Interstate Route 95 and State Route 1 skirt and traverse this region of study. At-grade crossings along the South Elmwood Bike Path are Mill Street, Parkview Boulevard, and Elmwood Avenue. For additional location information on these crossings, refer to the individual Segment Plans.

Railroad ties still remain along most of the lengths of the existing inactive Warwick Industrial Track rail corridor and the rails remain intact only along parts of the path.

The corridor is inaccessible in only a few sections where the vegetation is quite overgrown. The right of entry to the line has also been restricted in locations by fences that have been installed by bordering property owners. Other encroachments upon the rail line include gardens, landscaping, play equipment, and lawn furniture. There are also abutting owners that use the land as a dumping place for grass and tree trimmings as well as other debris.

The creation of the South Elmwood bicycle facility, with tie-in to the proposed Pontiac Secondary Shared Use Path, would provide commuters and recreational bicyclists with continuous increased access to the Washington Secondary Corridor Bike Path from points east. It would also create connections to the Pawtuxet River trails, the Cranston Cross City Bike Route, parks, commercial, industrial and historical districts. Public access and increased recreational usage along the river and adjoining sites would be accomplished.

This feasibility study investigates the possibility of developing the former and now inactive Warwick Industrial Track into a Shared Use Path through the City of Cranston. The proposed Shared Use Path design that is being considered is a multi-use 12-foot wide paved path that is separated from motor vehicle traffic and capable of handling two directions of traffic.

P&W currently has ownership of the Warwick Industrial Track Rail Line. In order to pursue any future development to build a path, RIDOT will work with the City of Cranston to coordinate a property transfer from P&W to develop the existing inactive rail corridor.

Because Ciba-Giegy has purchased the right-of-way at the beginning of the project, the proposed South Elmwood Shared Use Bike Path would begin at the western edge of Mill Street. Following the river westerly, the proposed bike path would continue on the inactive wooden trestle through a



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mix of residential and industrial sites. The path would proceed until it connects to the Cranston Cross City Bike Route at Law Avenue to Second Avenue, crossing Elmwood Avenue. The route would continue to Wellington Avenue, pass under the active AMTRAK railroad bridge, and connect to the proposed Pontiac Secondary bicycle facility.

Crosswalks, bikeway and destination signing, and pavement marking treatments are proposed at locations as shown on the plans and detailed in the discussion of each alternative. AASHTO and the “*Manual of Uniform Traffic Control Devices*” (MUTCD), Millennium Edition, Part 9, Traffic Controls for Bicycle facilities were used to propose signs and markings for the bikeway facilities for this project.

Due to the existing conditions and the related constraints as described in detail in each segment’s narrative, the recommended South Elmwood bicycle facility becomes a combination of a Shared Use Bike Path and Signed Shared Roadway. The proposed route is shown in its entirety on Figure 1, the Overall Site Plan.

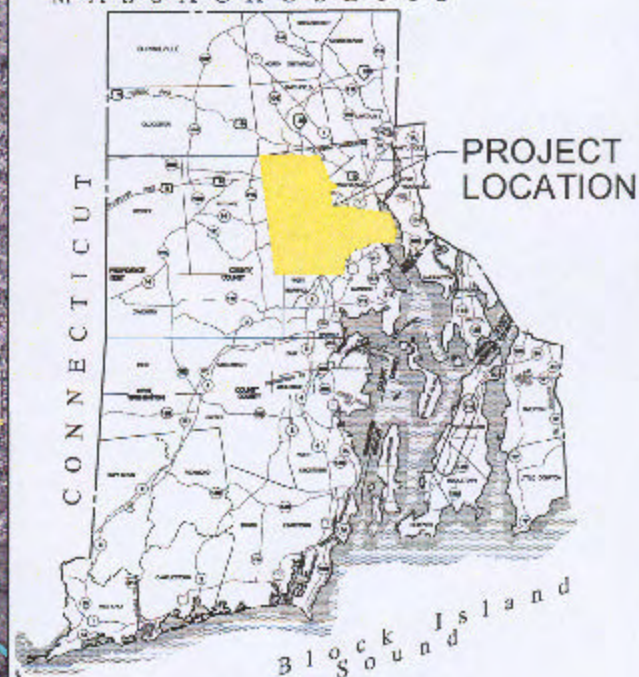
The opinion of probable cost to build the recommended South Elmwood Bike Path is approximately \$287,000. A breakdown of the associated items and costs to complete the bicycle facility for the South Elmwood Bike Path project is provided in Appendix A at the end of this report. This preliminary opinion does not include the costs related with required environmental permitting efforts, personal property and/or Providence & Worcester right-of-way acquisitions, or signalization.













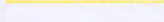


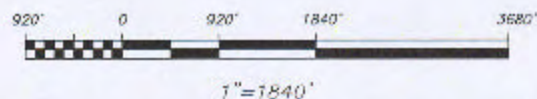
MASSACHUSETTS



LOCATION MAP  
Not To Scale

### LEGEND

-  PROPOSED CROSSWALK
-  PROPOSED SIGN
-  CONTINUATION OF ROUTE (COLOR VARIES)
-  EXISTING CRANSTON CROSS CITY BIKE ROUTE
-  EXISTING INACTIVE WARWICK INDUSTRIAL TRACK RAIL LINE
-  PROPOSED SOUTH ELMWOOD BIKE PATH
-  ABANDONED PONTIAC SECONDARY RAILROAD LINE (NOT IN USE)
-  APPROXIMATE CITY LINE
-  EXISTING ROADWAY

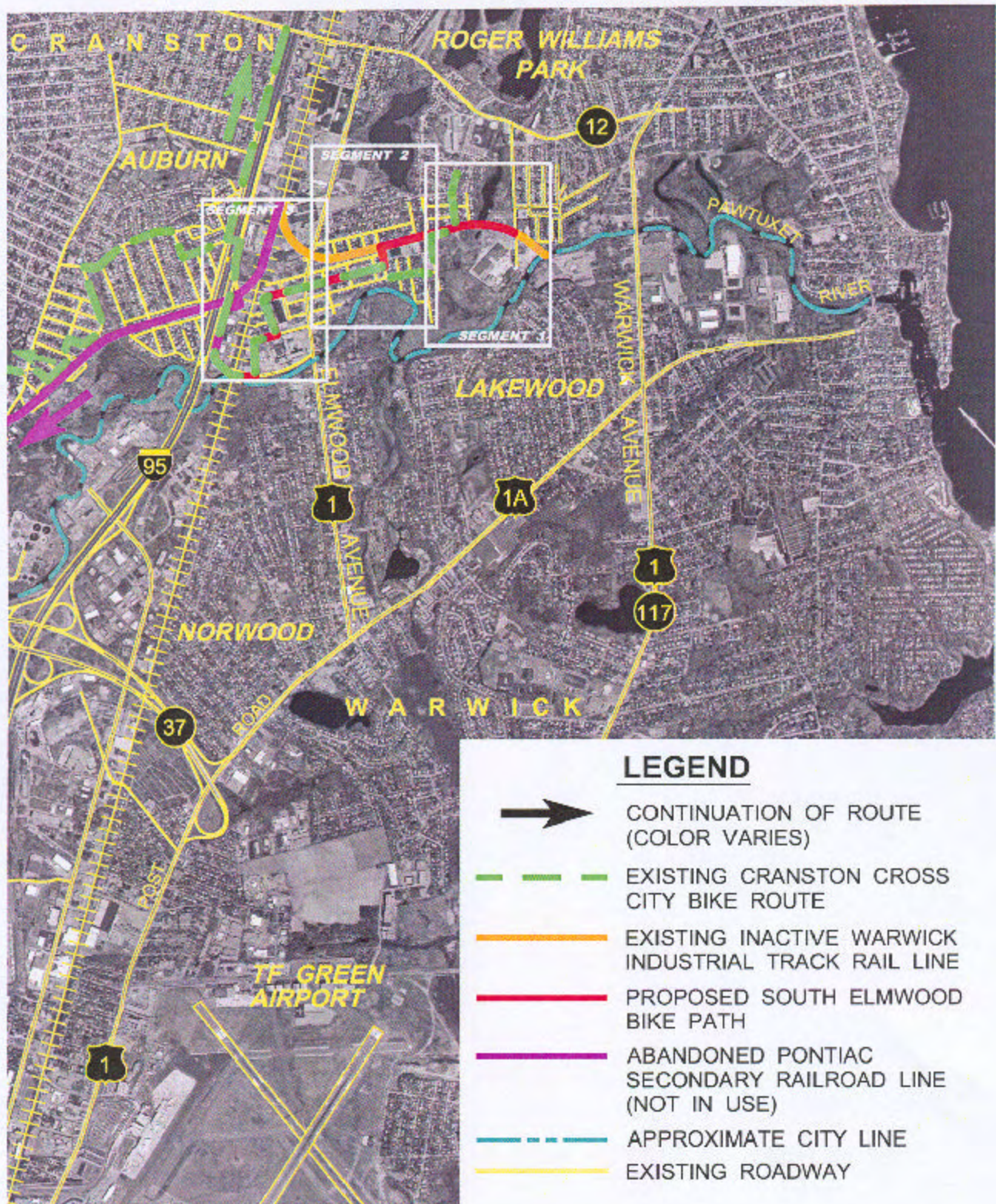


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SOUTH ELMWOOD BIKE PATH  
Cranston, Rhode Island  
OVERALL SITE PLAN





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 SEGMENT LOCATION PLAN



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## CRITERIA

### Design Criteria

Recommendations for bikeway classification and design of the South Elmwood Bike Path project were based on the 1999 AASHTO “*Guide for the Development of Bicycle Facilities*”. A description of each of the four bike facility types is explained below and Figure 3, Bike Facility Class, illustrates three of these types. The recommended bicycle facility is based on several factors including the ability of the users, specific corridor conditions, existing roadway conditions, and associated costs necessary to upgrade the roadway to an acceptable bicycle facility.

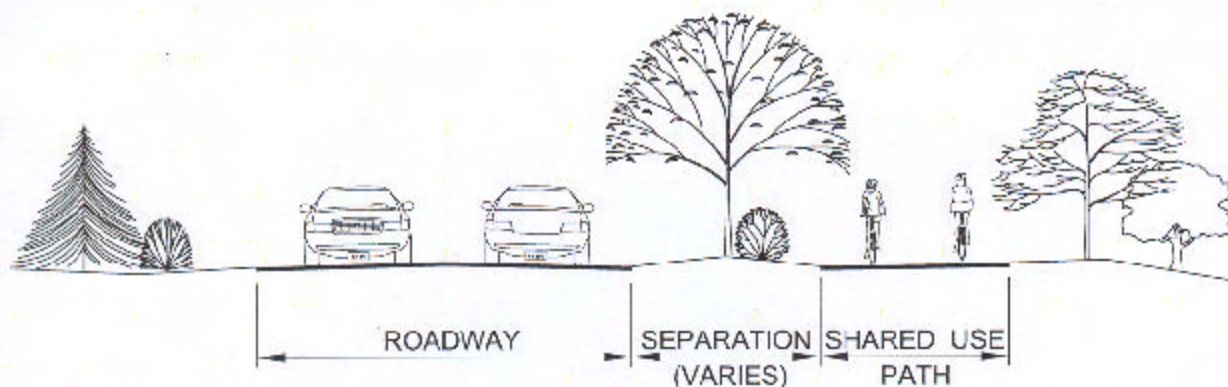
### Shared Roadways:

A Shared Roadway facility has no bikeway classification or designation. According to AASHTO, different types of roadway conditions can result in a Shared Roadway designation. One condition is that the existing street system is currently being used for efficient bicycle travel without signing and striping. A second condition is that the existing roadway is not deemed suitable for bicycle travel and, therefore, bicycle travel should not be encouraged by designating the Signed Shared Roadway by means of signing and/or marking as an approved bikeway. Another condition that could lead to a Shared Roadway classification is that the roadway is not considered a high demand bicycle corridor and as such the road should not be designated as another bikeway classification, regardless of roadway conditions. On roadways without designated bikeways, a minimum lane width of 12 feet, 14 feet desirable, can best accommodate both the bicyclist and motorist.

### Shared Use Path:

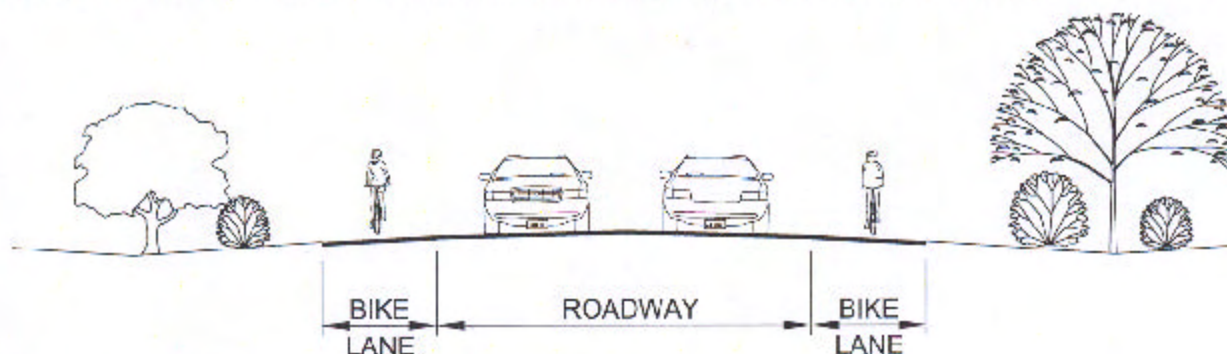
Shared Use Paths should be thought of as a complementary system of off-road transportation routes for bicyclists and others that serve as a necessary extension to the roadway network. Most Shared Use Paths are facilities on exclusive right-of-way, are designed off-road, and are physically separated from motor vehicle traffic. Shared Use Paths can be located along rivers, ocean fronts, canals, abandoned or active railroad and utility right-of-way, limited access freeways, within college campuses or within and between parks. Shared Use Paths are designed to work with the on-road bicycle facilities to provide the greatest opportunities to bicyclists and pedestrians. For Shared Use Paths to be successful, it is very important to provide users with connections to the roadway network. A critical component of Shared Use Paths are the transitions to and from the roadway network.





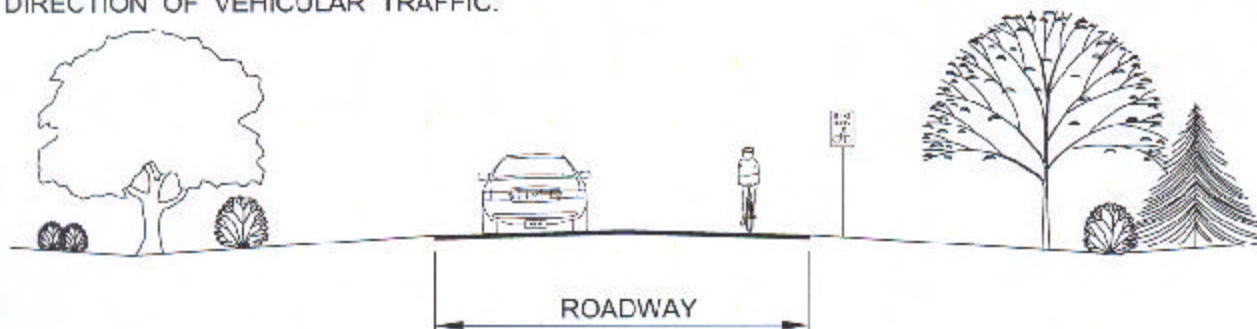
## SHARED USE PATH

A BIKEWAY PHYSICALLY SEPARATED FROM MOTORIZED VEHICULAR TRAFFIC BY AN OPEN SPACE OR BARRIER WITHIN THE HIGHWAY RIGHT - OF - WAY OR WITHIN AN INDEPENDENT RIGHT - OF - WAY. THESE PATHS WILL ALSO BE USED BY PEDESTRIANS, SKATERS, WHEELCHAIRS, JOGGERS AND OTHER NON - MOTORIZED USERS.



## BIKE LANE

A PORTION OF A ROADWAY WHICH HAS BEEN DESIGNATED BY STRIPING, SIGNING, AND PAVEMENT MARKINGS FOR THE PREFERENTIAL OR EXCLUSIVE USE OF BICYCLISTS. BIKE LANES ARE ONE - WAY DIRECTIONAL TRAVEL LANES, CORRESPONDING WITH THE DIRECTION OF VEHICULAR TRAFFIC.



## SIGNED SHARED ROADWAY

A SIGNED SHARED ROADWAY WHICH HAS BEEN DESIGNATED BY SIGNING AS A PREFERRED ROUTE FOR BICYCLE USE. THE SIGNED SHARED ROADWAY, WHICH IS OPEN TO BOTH BICYCLE AND MOTOR VEHICLE TRAVEL, MAY BE WITH OR WITHOUT PAVED SHOULDERS AND / OR CURBING. BICYCLISTS TRAVEL IN THE SAME DIRECTION AS VEHICLES SHARING THE SAME SIDE OF THE ROADWAY.

Not To Scale



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BIKE FACILITY CLASS



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### Bike Lane:

A Bike Lane is a portion of roadway that has been designated with striping, signing, and pavement markings for preferred or exclusive use by bicyclists. Bike Lanes should always be one-way, carrying bicyclists in the same direction as the adjacent travel lane and on the right side of the road. Minimum travel lane width is the same as for that of the Shared Roadway, 12 feet minimum, 14 feet desirable. Widths greater than 14 feet may encourage the undesirable operation of two motor vehicles in one lane and therefore is not recommended. In areas where 15 feet or more of pavement width exists, striping of lanes for bikes or shoulders should be considered. Width requirements for Bike Lanes vary according to roadway conditions. Bike Lanes may have a minimum width of 4 feet, where the area beyond the paved shoulder can provide additional maneuvering width. A width of 5 feet or greater is preferred where truck traffic is present or where motor vehicle speeds exceed 50 MPH. Where parking is permitted, the Bike Lane should be placed between the parking area and the travel lane and have a minimum width of 5 feet. A Bike Lane should be delineated from motor vehicle travel lanes with a 6-inch solid white line. Figure 4, Typical Bike Lane Cross Sections, is the standard provided by AASHTO for the delineation and designation of Bike Lanes for different roadway situations.

### Signed Shared Roadway:

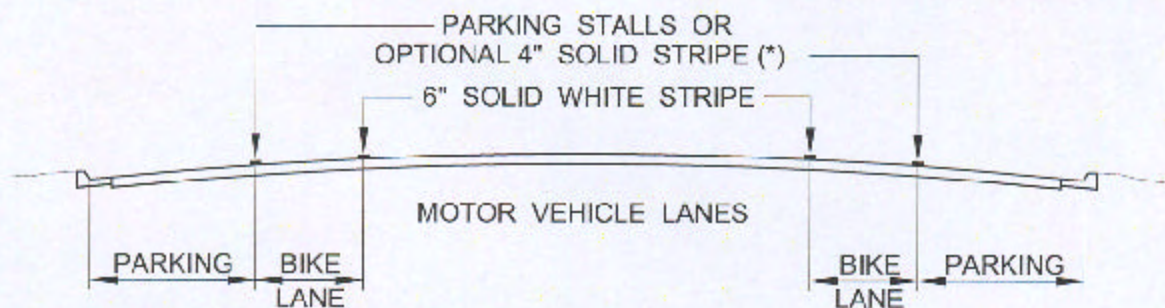
Signed Shared Roadways are those roads that have been identified by signing only as preferred bike routes through high demand corridors. Certain criteria must be considered prior to signing a Signed Shared Roadway. These include, but are not limited to, the removal or restriction of on-street parking, smooth riding surface, regularly maintained roadways that meet the needs of bicyclists, and have wide shoulders.

A Signed Shared Roadway should have particular advantages for bicyclists over alternative routes. According to AASHTO, Signed Shared Roadways should provide through and direct travel, connect to other bicycle facilities, and give priority to bicyclists. Signing also advises motorists that bicycles are present.

### General Guidelines

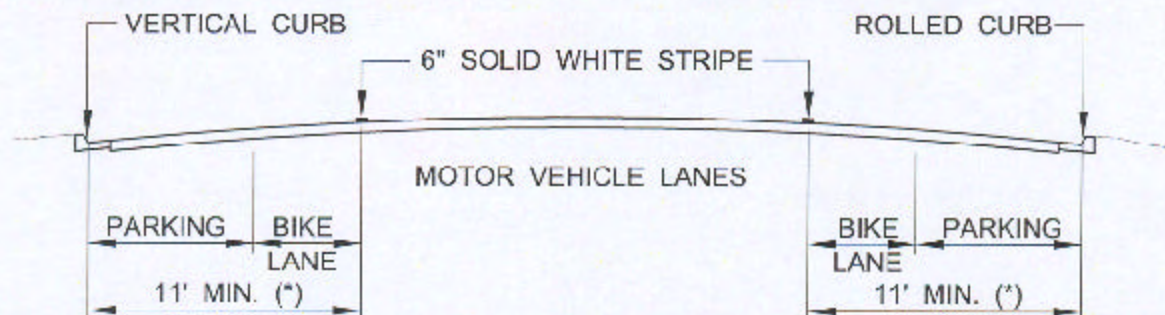
AASHTO provides three bicycle user types that are a helpful guide in assisting highway designers in determining the impact of different facility types and roadway conditions on bicyclists:





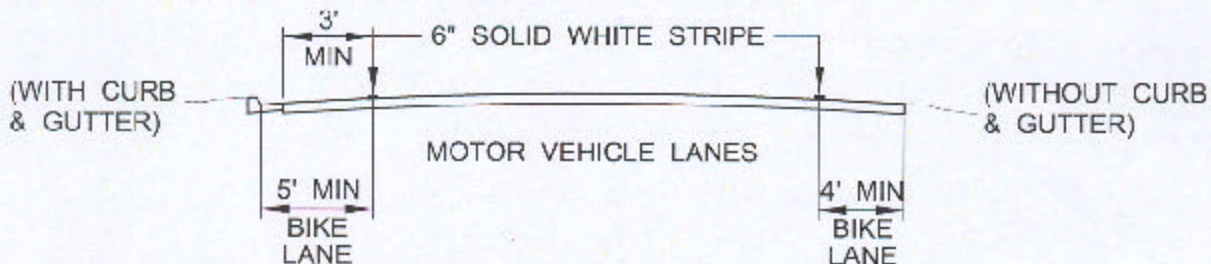
## ON STREET PARKING

\*THE OPTIONAL SOLID WHITE STRIPE MAY BE ADVISABLE WHERE STALLS ARE NECESSARY (BECAUSE PARKING IS LIGHT) BUT THERE IS CONCERN THAT MOTORISTS MAY MISCONSTRUE THE BIKE LANE TO BE A TRAFFIC LANE.

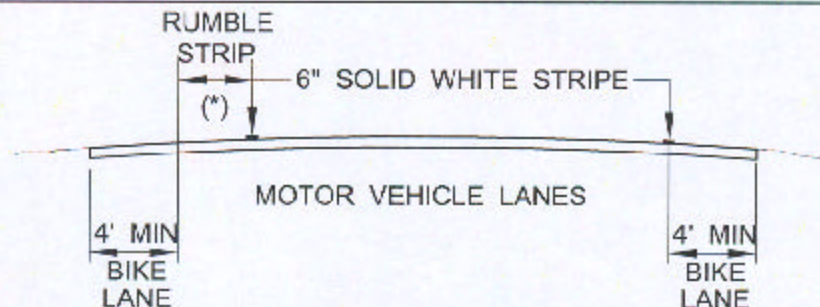


## PARKING PERMITTED WITHOUT PARKING STRIPE OR STALL

\* 13' IS RECOMMENDED WHERE THERE IS SUBSTANTIAL PARKING OR TURNOVER OF PARKED CARS IN HIGH (e.g. COMMERCIAL) AREAS.



## PARKING PROHIBITED



## TYPICAL ROADWAY IN OUTLYING AREAS PARKING PROTECTED

\*IF RUMBLE STRIPS EXIST THERE SHOULD BE 4' MINIMUM FROM THE RUMBLE STRIP TO THE OUTSIDE EDGE OF THE SHOULDER.

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TYPICAL BIKE LANE  
CROSS SECTIONS



- 
- Group A – Advanced Bicyclists: These are experienced riders who can operate under most traffic conditions. They are typically comfortable riding with motor vehicle traffic; however they need sufficient operating space on the traveled way or shoulder to eliminate the need for either them or a passing vehicle to shift position.
  - Group B – Basic Bicyclists: These are casual or new adult and teenage riders who are less confident of their ability to operate in traffic without special provisions for bicycles. Thus, basic riders are comfortable riding on neighborhood streets and Shared Use Paths and prefer designated facilities such as Bike Lanes or wide shoulder lanes on busier streets.
  - Group C – Children: These bicyclists ride on their own or with their parents. Residential streets with low motor vehicle speeds, linked with Shared Use Paths and busier streets with well-defined pavement markings between bicycles and vehicles, can accommodate children without encouraging them to ride in the travel lane of major arterials.

According to AASHTO, “width is the most critical variable affecting the ability of a roadway to accommodate bicycle traffic. In order for bicycles and motor vehicles to share the use of a roadway without compromising the level of service and safety for either, the facility should provide sufficient paved width to accommodate both modes.” AASHTO recommended paved widths vary with the roadway conditions. Like that of a “Shared Roadway,” minimum lane width of 12 feet is required but 14 feet is desirable to accommodate both bicyclists and motorists. These minimum useable lane widths provide maneuvering room for drivers exiting from or in areas with limited sight distances.

Signed Shared Roadways should be signed approximately every  $\frac{1}{4}$  mile and at signalized intersections with both guide and supplemental signs. Also, directional signs are to be placed at every turn to both mark the road and to confirm that the rider has made the correct turn. Bicycle warning signs will be installed to warn bicyclists of conditions not readily apparent, such as “HILL” or “CURVE”, along the route. Roadways that do not meet the criteria for a Signed Shared Roadway should not be signed as such. However, destination signs may be posted if the roadway leads to a logical destination such as a park, school, or municipal offices. Crossing signs and crosswalks can be proposed at locations where it is necessary to cross the road to access Signed Shared Roadways, Shared Use Paths, or other destinations. The “*Manual of Uniform Traffic Control Devices*” (MUTCD) provides regulatory standard sign standards and markings.



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## SEGMENT 1

### **Description:**

The area studied for this approximate ½ mile segment begins at the existing inactive Warwick Industrial Track Rail Line crossing at the Ciba Geigy's pedestrian and rail bridge and continues in a westerly direction to the dead end of Dekalb Street. Figure 5, the Segment 1 Plan, shows the segment's location and its approximate project limits.

### **Existing Conditions:**

The easterly terminus of the Warwick Industrial Track Rail Line is at the Pawtuxet River Trail, at the site of the Ciba-Geigy pedestrian and rail bridge (Photo 1). The initial 300 feet of the proposed Shared Use Path for this segment abuts three residential property owners whose parcels are located along the southern end of the Roberts Circle loop (Photo 2). It then passes through the paved parking lot of the former Ciba-Geigy chemical plant before crossing Mill Street (Photo 3).



*Photo 1. Pawtuxet River Trail Connection At The Ciba-Geigy Pedestrian and Rail Bridge.*



*Photo 2. Roberts Circle At Pawtuxet River Edge*



*Photo 3. Parking Lot At Ciba-Geigy*



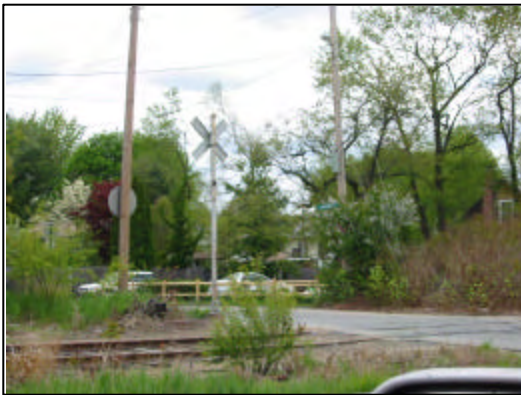


*Photo 4. Bellefont Pond*



*Photo 5. Rail Line Near The River Bank Industrial Park*

Westerly from the edge of Mill Street the proposed path passes through a relatively flat wetland and heavily vegetated area adjacent to the Bellefont Pond located to the north of the railroad line. It is at this location that two large culverts cross under the railroad tracks (Photo 4). South of this section is abandoned and vacant Ciba-Giegy buildings, some are being renovated and developed into the River Bank Industrial Park (Photo 5). The rail line then crosses Parkview Boulevard and continues



*Photo 6. Crossing At Parkview Boulevard*



*Photo 7. Rail Line Along Weingeroff Boulevard*

in a westerly direction, (Photo 6), running alongside the northern edge of Weingeroff Boulevard to the dead end of Dekalb Street (Photo 7). There are two additional residential properties that abut the path in the vicinity of Arcadia Avenue. The LaGrange Street right-of-way separates property owners along Endicotti Street from the Shared Use Path.

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The existing Cranston Cross City Bike Route is signed in this segment along Weingeroff Boulevard and Parkview Boulevard (Photo 8).



*Photo 8. Cranston Cross City Bike Route Along Weingeroff Boulevard*

Parkview Boulevard in Cranston extends from Roger Williams Park in Providence to approximately 50 yards from the Pawtuxet River. At the end of Park View Boulevard is an unimproved walking trail that extends south approximately 500 yards to the banks of the Pawtuxet River. The trail is used by nearby residents as a popular walking trail between Roger Williams Park and the Pawtuxet River. In addition, the City of Cranston has proposed a combined active and passive recreational facility at the lower end of Park View Boulevard. The City is currently investigating property acquisition.

### **Findings:**

The Ciba-Giegy Company has purchased the inactive rail line, westerly from the river's edge to the west side of Mill Street. The Ciba Geigy pedestrian and rail bridge is inaccessible from Mill Street; there is a chain link fence and gate across the Ciba-Giegy parking lot. This obstacle causes the proposed path to begin on the western edge of Mill Street. A future Signed Shared Roadway along these local residential streets, from Mill Street to the nearby recreational Fay Field, would create a link to its walking trails and access locations to the Pawtuxet River Trail system. An arrangement could be investigated with a future developer of the Ciba-Giegy property and the City of Cranston that would allow for the path to extend over the Pawtuxet River and into the Belmont Park area of Warwick.

A crosswalk and advanced bike crossing signs would be necessary on Parkview Boulevard to warn the motorist of the upcoming proposed Shared Use Path crossing. The horizontal sight distance on the Weingeroff/Parkview Boulevards curve for the eastbound motorist on Weingeroff Boulevard warrants a warning sign indicating "CURVE". The existing railroad crossing signs at this location would have to be either removed or utilized to indicate that the path crosses ahead.

It is recommended that destination signing be installed on the Parkview and Weingeroff Boulevards that informs the bicyclist traveling on this Cranston Cross City Bike Route of the option to connect



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to the South Elmwood Shared Used Path. Destination signing along the proposed path indicating the direction to the Roger Williams Park along Parkview Boulevard is recommended here as well. This arrangement accomplishes a connection to the regional and state bike network systems by means of designating and utilizing existing Signed Shared Roadways.

The described path's proposed signage is to be placed at the approximate locations as indicated on Figure 5, the Segment 1 Plan.

Referring to the Environmental Permitting section of this report, locations of wetlands and associated potential impacts have been indicated within this segment. The required environmental permits that would be required to build this facility within the wetland boundaries is also discussed.

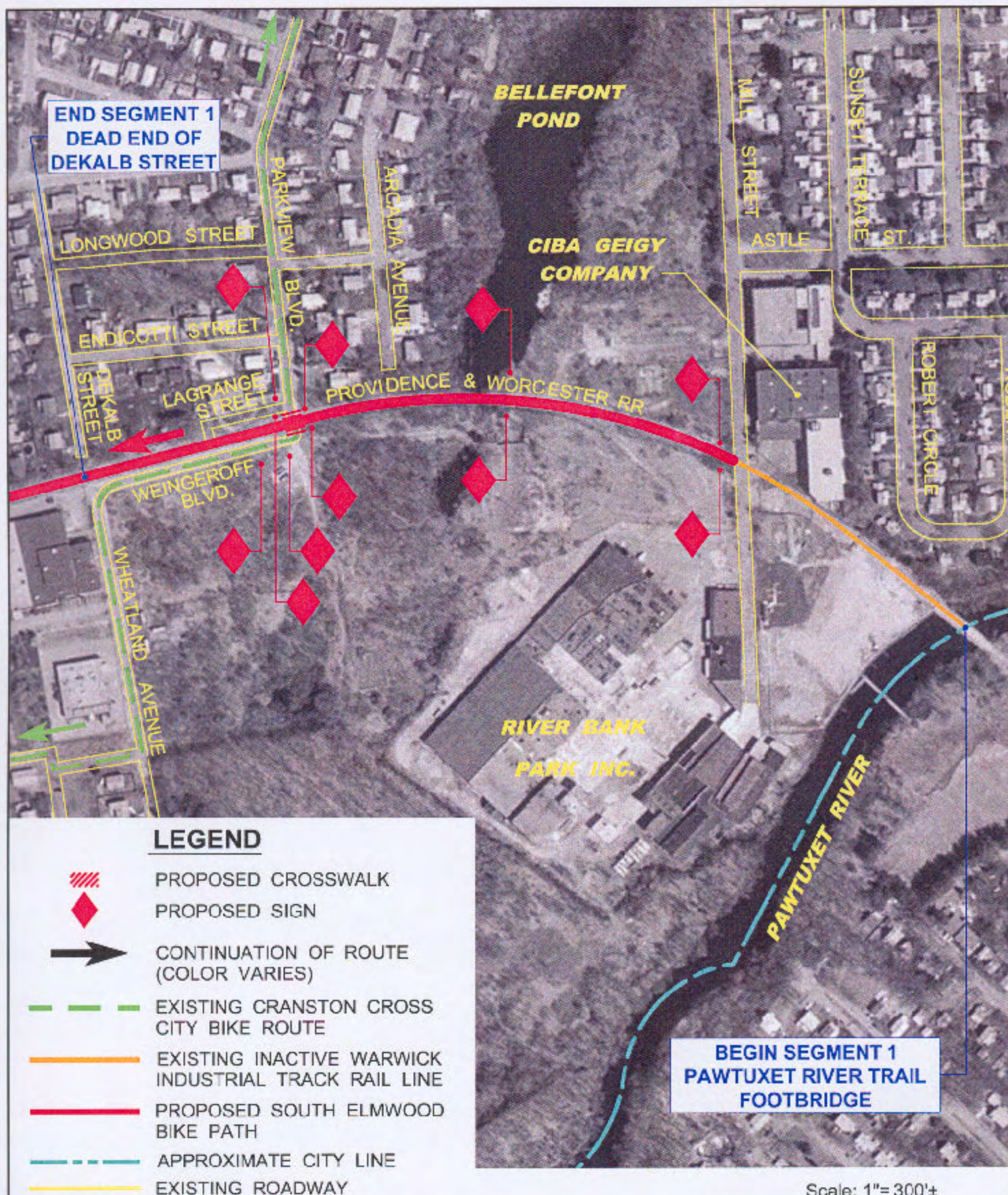
Clearing the area of the proposed Shared Use Path, including the removal of the existing railroad ties and lines, is required in the 1,500-foot section between Mill Street and Parkview Boulevard and along the edge of Weingeroff Boulevard. There are several additional abandoned railroad spurs on the approach to the Ciba-Giegy property and near Parkview Boulevard that will require removal as well.

To address the concerns that landowners may have regarding trespassing and privacy or to resolve issues about the trail interfering with agricultural or business activities on their properties, the property owner may install fencing and landscaping such that a buffer would be provided between them and path users.

To accommodate a Shared Use Path on the inactive rail corridor within this entire segment, the opinion of probable cost for the implementation of this preferred proposed bicycle facility is approximately \$195,000. A breakdown of the associated items and costs to build this section of the South Elmwood Path project is provided in the Appendix A at the end of this report. The preliminary opinion of probable cost does not include the costs related with required environmental permitting efforts, personal property and/or Providence & Worcester right-of-way acquisitions.







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Cranston, Rhode Island  
SEGMENT 1



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## SEGMENT 2

### **Description:**

The area studied for this approximate 2,500 foot segment begins at the dead end of Dekalb Street, crosses Elmwood Avenue (Route 1), and ends at the edge of the southbound travel lane of Elmwood Avenue (Route 1) at Second Avenue. Elmwood Avenue is a four-lane road with two lanes striped for passing in each direction. In Technical Paper No. 130, the Rhode Island Department of Administration, Division of Planning, has classified Elmwood Avenue as a connecting link of rural principal arterial (Urban). Elmwood Avenue is a State owned and maintained road. Figure 6, the Segment 2 Plan, show the segment's location and its approximate project limits.

### **Existing Conditions:**

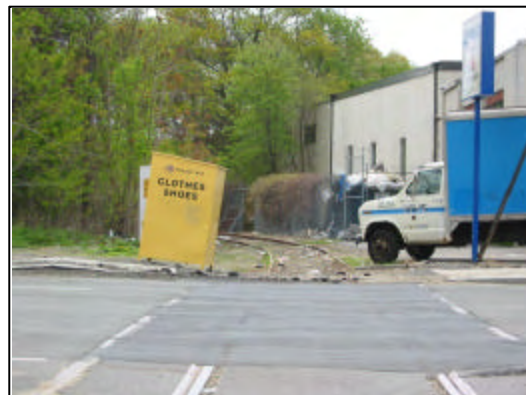
The beginning 820 feet of a Shared Use Path for this section, from Dekalb Street to Maxim Street, runs between the site of the business Gem Case, Inc. to the south and six residential properties to the north (Photo 9). Fencing has been installed on both sides of the railroad's right-of-way in this section. Proceeding from Maxim Street to Elmwood Avenue, the path continues to run parallel and between First Avenue and Burbank Street. This portion of Segment 2 is in a neighborhood of predominately 1/8 to 1/4 acre lots (Photo 10). A total of twenty-one properties abut the railroad corridor. Prior to meeting the edge of Elmwood Avenue, the path would pass by two industrial-commercial parcels (Photo 11).



*Photo 9. Looking East Along Rail Line Near GEM Case, Inc.*



*Photo 10. Looking West Along The Rail Line Towards Elmwood Avenue*



*Photo 11. Looking East Along Rail Line At Elmwood Avenue*

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There are backyards of several lots in this segment that are located close to the rail line. It appears that along the existing inactive rail line some property owners are using the railroad's right-of-way to the rear of their backyards. Gardens, landscaping, and fencing are in these extended areas, especially apparent in the vicinity from Law Avenue to 500 feet west towards Elmwood Avenue.

The last 700 feet of the rail line before meeting Elmwood Avenue is littered with debris and has become a dumping ground for tires, appliances, and other trash items.



*Photo 12. Belmont Park*

The path in this segment is in a relatively flat area with little overgrowth or vegetation. Belmont Park, an approximate 38 acre City-owned and maintained park with several recreational playing fields and walking paths, is located approximately ¼ mile south of this segment's limits (Photo 12). The Cranston Cross City Bike Route is signed in this segment on Law Avenue, to Dresden Street, Wheatland Avenue, and Weingeroff Boulevard to Parkview Boulevard. To the west, it is signed along Second Avenue, crossing at Elmwood Avenue.

### **Findings:**

Clearing the area to make way for a Shared Use Path would include primarily the removal of the existing railroad ties and lines as well as a general clean up for this segment.

It will become necessary to inform residents in this area of their encroachment onto the railroad's right-of-way. Fencing and landscaping may be able to be installed to address concerns that landowners may have regarding trespassing and privacy or to resolve issues about the trail interfering with agricultural or business activities on their properties. This would provide a buffer between the properties and the path users.

Through coordination with the Rhode Island Department of Transportation and the City of Cranston the proposed path alignment may better serve the community by eliminating the section from Law Avenue to Elmwood Avenue, along the abandoned railroad corridor. This alternative would





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propose not utilizing the remaining 1,200-feet of abandoned railroad corridor. Instead, a connection may be made from Law Avenue to Second Avenue and onto the existing Cranston Cross City Bike Path. As a safety concern, this alternative would eliminate bicycles from traveling along Elmwood Avenue.

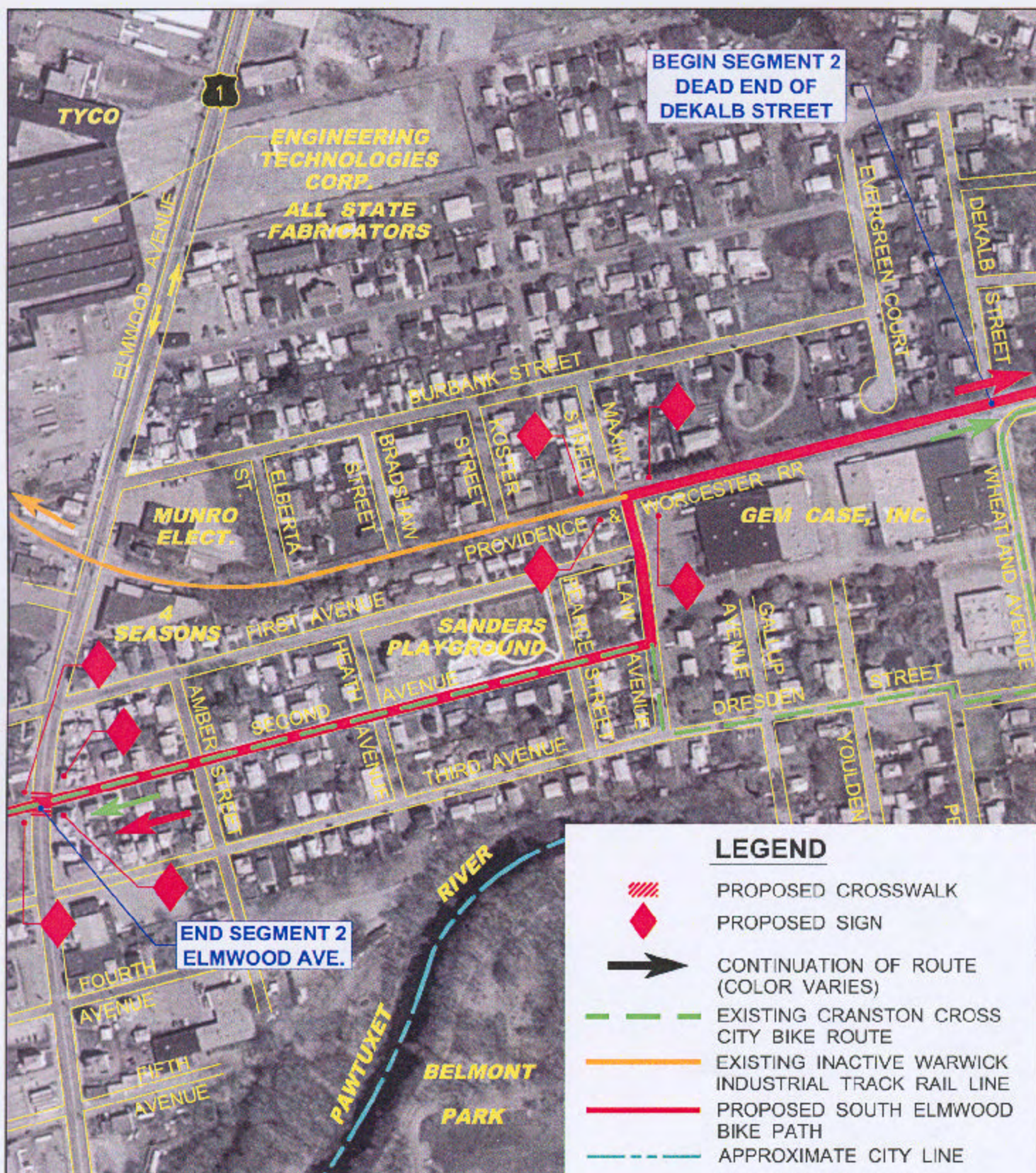
Even though the Cranston Cross City Bike Route has already been signed to cross Elmwood Avenue, a signal may be required at the site of the proposed Signed Shared Roadway crossing. Should the project advance to design it will be necessary to conduct a traffic study and analysis at the Elmwood Avenue crossing with the proposed alignment location to determine if signalization is warranted. Additionally, advanced bike crossing signs are proposed in both directions on Elmwood Avenue to warn the motorist of the upcoming bike route crossing. Advanced road crossing signs on the Cranston Cross City Signed Shared Roadway at the approach to Elmwood Avenue is recommended to warn the bicyclist of the Elmwood Avenue crossing.

The described bike facility's proposed signage is to be placed at the approximate locations as indicated on Figure 6, the Segment 2 Plan.

The opinion of probable cost for the implementation of the proposed bicycle facility within this segment is approximately \$92,000. A breakdown of the associated items and costs to build this section of the South Elmwood Bike Path project is provided in the Appendix A at the end of this report. The preliminary opinion of probable cost does not include the costs related with required environmental permitting efforts, personal property and/or Providence & Worcester right-of-way acquisitions, or signalization.







PARE ENGINEERING CORPORATION  
& BLACKSTONE VALLEY PLACE  
LINCOLN, RI 02865  
401-334-4100



METROPOLITAN PROVIDENCE  
BICYCLE FACILITIES  
SITE ASSESSMENT PROJECT  
SOUTH ELMWOOD BIKE PATH  
Cranston, Rhode Island  
SEGMENT 2



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## SEGMENT 3

### **Description:**

The area studied for this approximate 1,200-foot segment begins at the edge of the southbound travel lane of Elmwood Avenue (Route 1). This segment ends where the existing Pontiac Secondary Rail Line begins, at the active AMTRAK Rail Line. Figure 7, the Segment 3 Plan, shows the segment's location and its approximate project limits.

### **Existing Conditions:**

After crossing the four lanes of Elmwood Avenue, the existing inactive Warwick Industrial Track Rail Line passes through an industrial area before converging onto the active Northeast corridor AMTRAK Rail Line (Photo 13). There are nine industrial sites that abut the rail's right-of-way in this segment.



*Photo 13. Looking West Along The Rail Line On Elmwood Avenue*



*Photo 14. Cranston Cross City Bike Route At Second & Gardner Avenues*

The Cranston Cross City Bike Route is signed in this area. It is signed south of the Elmwood Avenue rail crossing, west along Second Avenue, and ultimately along Wellington Avenue (Photo 14). This segment investigates the possibility of utilizing the Cranston Cross City Bike Route as the eventual connection to the Well's Avenue railroad bridge in the Pontiac Secondary section.

### **Findings:**

Safety issues negate the possibility of employing an at-grade crossing of the proposed bike facility at the active high speed AMTRAK Railroad Line. Continuing the Shared Use Path design here is not a viable option to be considered since it would require tunneling under or bridging over the electrified, high-speed rail line.



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In order to avoid the approach to the AMTRAK crossing, it would not be feasible to continue on the existing inactive rail corridor west of Elmwood Avenue. Instead, it is recommended that the existing signed Cranston Cross City Bike Route be used in this area as the connection to the Pontiac Secondary Path. A Shared Use Path on the rail line would end at the intersection with Law Avenue. It would become a Signed Shared Roadway signed along Law Avenue, joining the existing Cranston Cross City Bike Route that is located at the intersection of Second Avenue. At this location, the South Elmwood proposed bicycle facility and the Cranston Cross City Bike Route would be the same, i.e. crossing Elmwood Avenue and traveling on Gardner Avenue to Avery Street and ultimately to Wellington Avenue.

Signed Shared Roadway signs would be required along the Law Avenue from the end of the proposed South Elmwood Shared Use Path to the existing Cranston Cross City Bike Route connection located at Second Avenue. This Signed Shared Roadway's proposed signage is to be placed at the approximate locations as indicated on Figure 7, the Segment 3 Plan.

There are existing Cranston Cross City Bike Route signs at the crossing of Elmwood Avenue and Second Avenue directing the bicyclist towards and onto Wellington Avenue and under the railroad bridge (Photo 15).



*Photo 15. AMTRAK Railroad Bridge Over Wellington Avenue*

The Pontiac Secondary Path project would become part of the Cranston Cross City Bike Route, from Second Avenue, to Wellington Avenue and the Wellington Avenue railroad overpass. No additional signage is necessary within this segment since the Cranston Cross City Bike Route is already currently and adequately signed in this vicinity.

The opinion of probable cost for the implementation of the proposed bicycle facility within this segment is approximately \$1,000. A breakdown of the associated items and costs to build this section of the South Elmwood Path project is provided in the Appendix A at the end of this report.









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The preliminary opinion of probable cost does not include the costs related with required environmental permitting efforts and personal property right-of-way acquisitions.





## LEGEND

-  PROPOSED SIGN
-  CONTINUATION OF ROUTE (COLOR VARIES)
-  EXISTING CRANSTON CROSS CITY BIKE ROUTE
-  EXISTING INACTIVE WARWICK INDUSTRIAL TRACK RAIL LINE
-  PROPOSED SOUTH ELMWOOD BIKE PATH
-  ABANDONED PONTIAC SECONDARY RAILROAD LINE (NOT IN USE)
-  APPROXIMATE CITY LINE
-  EXISTING ROADWAY



Scale: 1"= 350'±



PARE ENGINEERING CORPORATION  
9 BLACKSTONE VALLEY PLACE  
LINCOLN, RI 02885  
401-334-4100



METROPOLITAN PROVIDENCE  
BICYCLE FACILITIES  
SITE ASSESSMENT PROJECT  
SOUTH ELMWOOD BIKE PATH  
Cranston, Rhode Island  
SEGMENT 3



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## ENVIRONMENTAL PERMITTING

It will become necessary to address wetland impacts for portions of the final accepted recommended South Elmwood Bike Path bicycle facility.

Portions of the proposed South Elmwood Bike Path are within the Rhode Island Department of Environmental Management (RIDEM) regulatory jurisdiction. RIDEM's *'Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act'* April 1998, would apply to the accepted and approved findings as presented in this report.

The RIDEM would coordinate with the Army Corps of Engineers Programmatic General Permit Program for required permits. The impacts to regulated wetlands include Area Subject to Storm Flowage (ASSF), Wetland Complex, Stream, Pawtuxet River, 50-foot Perimeter Wetland, 100-foot Riverbank Wetland, and 200-foot Riverbank Wetland.

Prior to proceeding into the design stage, it would be required to establish the location of the proposed alignment in the field. The associated wetland delineation, together with a field investigation, would be needed in this area. Exact location and size of the impacted adjoining wetland areas due to the construction of the path would be identified. As well, potential associated Perimeter or Riverbank Wetlands would need to be documented.

The proposed South Elmwood Bike Path is located within the Pawtuxet River watershed. The Pawtuxet River and Bellefont Pond are the major water bodies to be found in the project area. According to the Rhode Island Geographic Information System (RIGIS), no rare species or endangered habitat are cited within the area of the proposed bicycle facility.

The following is a breakdown of the potential RIDEM jurisdictional wetland impacts that could occur within each segment limits of the proposed bike facility.

- Within the limits of Segment 1 there are probable impacts to Bellefont Pond on the north side of the rail line and associated 50-foot Perimeter Wetland. A culvert waterway, flowing under the existing inactive rail line, is connected to the Pond and an open water wetland to the south. Bellefont Pond, the waterway, and the open water wetland are all considered a



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wetland complex. As such, it has an associated 50-foot Perimeter Wetland, extending from the wetland edges.

- Segment 2 has no known jurisdictional wetland impacts.
- Segment 3 includes impacts within the 200-foot Riverbank Wetland that branches off from the Pawtuxet River.

At the time of final design, precise and acute designation of the wetland boundaries and impacts will be required. Necessary permits would also need to be obtained. The preliminary opinion of probable costs included in this report does not include the costs that would be associated with required environmental permitting efforts.



**APPENDIX A. OPINION OF PROBABLE COST-ALL SEGMENTS**

	SEGMENT			1	2	3	Totals
	SEGMENT LENGTH			2500 LF	2000 LF	1200 LF	
ITEM CODE	ITEM	UNIT	UNIT PRICE				
201 0320	Clearing and Grubbing	ACRE	\$ 3,112 00	\$ 2,773 00	\$ 933 60	\$ -	\$ 3,706 60
201 9918	Remove and Dispose of Railroad Rails & Ties	LF	\$ 57 00	\$ 112,500 00	\$ 46,740 00	\$ -	\$ 159,297 00
202 0100	Earth Excavation	CY	\$ 7 00	\$ 5,435 00	\$ 2,555 00	\$ -	\$ 7,990 00
204 0100	Trimming and Fine Grading	SY	\$ 2 00	\$ 2,898 00	\$ 2,916 00	\$ -	\$ 5,814 00
302 0100	Gravel Borrow Subbase Course	CY	\$ 12 00	\$ 11,558 00	\$ 4,380 00	\$ -	\$ 15,938 00
401 0101	1 1/2" Modified Bituminous Binder Course	TON	\$ 48 00	\$ 7,178 00	\$ 4,560 00	\$ -	\$ 11,738 00
401 0200	1 1/2" Bituminous Surface Course-Type I-1	TON	\$ 48 00	\$ 6,989 00	\$ 4,560 00	\$ -	\$ 11,549 00
403 0300	Asphalt Emulsion Tack Coat	SY	\$ 1 00	\$ 279 00	\$ 1,094 00	\$ -	\$ 1,373 00
L01 0104	Plantable Soil 4" Deep	SY	\$ 4 00	\$ 4,150 00	\$ 2,916 00	\$ -	\$ 7,066 00
T15 0100	Directional, Regulatory and Warning Signs	SF	\$ 28 00	\$ 859 00	\$ 644 00	\$ 86 00	\$ 1,589 00
T20 2014	4" Epoxy Yellow Pavement Markings	LF	\$ 1 00	\$ 314 00	\$ 820 00	\$ -	\$ 1,134 00
	Typical Street Crossing Pavement Markings	EA	\$ 907 00	\$ 907 00	\$ 907 00		\$ 1,814 00
			Subtotal	\$ 155,840 00	\$ 73,025 60	\$ 86 00	\$ 228,951 60
			25% Contingency	\$ 38,960 00	\$ 18,256 40	\$ 21 50	\$ 57,237 90
			<b>SUB TOTAL</b>	\$ 194,800 00	\$ 91,282 00	\$ 107 50	\$ 286,189 50
			<b>TOTAL</b>	<b>\$ 195,000.00</b>	<b>\$ 92,000.00</b>	<b>\$ 1,000.00</b>	<b>\$ 287,000.00</b>



# **METROPOLITAN PROVIDENCE BICYCLE FACILITIES SITE ASSESSMENT PROJECT**

## **SOUTH ELMWOOD SPUR BICYCLE PATH**

**City of Cranston, Rhode Island**

**January 2003**



# **South Elmwood Spur Bicycle Facility**

## **Agenda**

- Introduction
- Update of project status
- Review of project
- General Discussion

# **South Elmwood Spur Bicycle Facility**

## **Background**

- The RI Department of Transportation (RIDOT) initiated a project proposal as part of the 2001-2002 Transportation Improvement Program (TIP) for the study & development phase of a proposed bicycle path facility within the inactive railroad corridor, known as the Warwick Industrial Track.
- The project application was approved by the Transportation Advisory Committee (TAC) and included in the TIP.
- RIDOT hired Pare Engineering Corporation for consultant services through the study & development phase for this and other Metropolitan Providence area bicycle path projects.

## **Purpose**

- The purpose of this study & development phase is to fully scope, assess and develop with community input, all necessary site assessment information, including cost estimates, in order to make informed decisions on the advancement of the project into the design phase.
- The study and development phase does not guarantee that a project will proceed into the next stage of development or be implemented; but it does assure that all the relevant information will be presented to RIDOT and the TAC for further consideration.

## **Project Description**

The project includes the creation of an approximately 1.5 mile long Class I shared use bike path along the former railroad corridor South Elmwood area of Cranston and the Cranston/Warwick city limits. The bike path would provide pedestrians, commuters and recreational bicyclists access to schools, government centers, recreational sites, historic sites, and neighborhoods and link to the proposed Pontiac Secondary Bike Path. In addition, potential connections include the Washington Secondary Bike Path, Pawtuxet River Trail, Cranston's Cross City on-road bike route network, and the proposed recreational facility in the Belmont Park area in Warwick.

## **Tasks to be Performed**

- Coordinate with the City of Cranston (City) on its project concept and its relation to the Cranston Comprehensive Plan.
- Gather and analyze all relevant data, mapping, and existing conditions.
- Develop and evaluate route alternatives for the bike path, considering potential right-of-way and environmental impacts, and cost estimates
- In close coordination with the City, all the alternatives will be summarized and a route alternative(s) will be recommended.

## **Next Steps/Process**

- After meeting with the City, collect all available data and plans from the City to assist in developing the routes and potential alternatives.
- Continue to coordinate with the City as potential route alternatives are developed, screened and recommended.
- Present findings to TAC for consideration for funding into the TIP.





## MEMORANDUM

DATE: January 22, 2003

TO: Steve Church, RIDOT

CC: John Shevlin, P.E.  
File

FROM: Virgil Gray, P.E.

RE: Metropolitan Providence Bicycle Facility Site Assessment  
Project – Request for City of Cranston GIS Information  
PARE No. 02175.00

As per our discussions during the January 16, 2003 kick-off meeting with the City of Cranston, PARE requests the City's GIS information with regards to this project. We would like to be provided the following electronic information with all data sets available:

Block 1: G-16, G-17, G-18, H-17, and H-18  
Block 2: G-14, G-15, H-13, H-14, and H-15  
Block 4: I-12, I-13, I-14, J-12, J-13, K-12, K-13, L-10, L-11, L-12, and L-13



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Transportation  
DIVISION OF INTERMODAL PLANNING  
Two Capitol Hill  
Providence, RI 02903 - 1124

OFFICE (401) 277-2694  
FAX (401) 277-2207  
TDD 277-4971

RECEIVED PARE	
DATE: 1-28-03	
JOB NO: 0217570	
COPIES TO	
Civil	
Marketing	
Environmental & Planning	<input checked="" type="checkbox"/>
Transportation	<input checked="" type="checkbox"/>
JPS	<input checked="" type="checkbox"/>
VG	<input checked="" type="checkbox"/>
JOB FILE: <input checked="" type="checkbox"/>	INC. <input checked="" type="checkbox"/>

January 24, 2003

Mr. Kevin Flynn  
Director, Department of Planning  
869 Park Avenue  
Cranston, Rhode Island 02910

**Subject:** Metropolitan Providence Bicycle Facility Site Assessment Project  
Pontiac Secondary Railroad Right-of-way  
South Elmwood Spur Right-of-way  
RI Contract No. 2002-EI (008)  
RI FAP No. HPP-1827 (003)

Dear Mr. Flynn: *Kevin*

At our January 16, 2003 project start-up meeting, Pare Engineering requested the City provide GIS information with regards to this project.

Enclosed is a listing from Pare of the GIS electronic file information they are requesting. We would appreciate the assistance of your office in gathering this data. Please send the requested files to [vgray@parecorp.com](mailto:vgray@parecorp.com).

I appreciate the City's assistance with this request.

Sincerely,

Stephen A. Devine  
Chief, Program Development

Enclosure

C/ Steven C. Church, w/enclosure  
Virgil Gray, Pare Engineering



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Transportation  
DIVISION OF INTERMODAL PLANNING  
Two Capitol Hill  
Providence, RI 02903 - 1124

OFFICE (401) 277-2694  
FAX (401) 277-2207  
TDD 277-4971

March 4, 2003

Mr. Kevin Flynn  
Director of Planning  
869 Park Avenue  
Cranston, RI 02910

RECEIVED PARE	
DATE:	3-10-03
JOB NO:	02175.00
COPIES TO	
Civil	
Marketing	
Environmental & Planning	
Transportation	<input checked="" type="checkbox"/>
TPS	<input checked="" type="checkbox"/>
VG	<input checked="" type="checkbox"/>
JOB FILE:	<input checked="" type="checkbox"/>
INC.	<input checked="" type="checkbox"/>

Subject: Metropolitan Providence Bicycle Facility Site Assessment Project- Contract 1  
Consultant Field Reviews on Pontiac and South Elmwood Right-of-Ways  
RI Contract No. 2002-EI-008  
RI FAP No. HPP-1827 (003)

Dear Mr. Flynn: *Kevin:*

As per our discussions during our January 16, 2003 project start-up meeting, our consultant, Pare Engineering, Inc. has developed a schedule to conduct on-site field reviews of the Pontiac Secondary and South Elmwood right-of-ways in order to begin the site assessment work for these projects.

Pare has requested the following dates for these on-site reviews: Tuesday, March 18, 2003 and continue on Tuesdays and Thursdays for four weeks (March 20, 25, 27, and April 1, 3, 8, and 10, 2003).

We are requesting the City's review of this schedule. Should you require any additional information, please call me at 222-4203 ext. 4063.

Sincerely,

Stephen A. Devine  
Chief, Program Development

C/ Steven C. Church  
Virgil Gray, P.E., Pare Engineering





STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Rhode Island Department of Transportation  
ENVIRONMENTAL & INTERMODAL PLANNING

Two Capitol Hill, Providence, RI 02903-1124

ENVIRONMENTAL PHONE (401) 222-2023

INTERMODAL PHONE (401) 222-4203

FAX (401) 222-2207 TDD (401) 222-4971

December 1, 2003

Mr. John Shevlin, P.E.  
Vice President  
Pare Engineering Corporation  
8 Blackstone Valley Place  
Lincoln, RI 02865

RE: South Elmwood Spur  
Draft Design Study Report  
RI Contract No.: 2002-EI-008

RECEIVED PARE	
DATE:	12-3-03
JOB NO:	02175.00
COPIES TO	
Civil	—
Marketing	—
Environmental & Planning	—
Transportation	—
VG W/Prod.	—
DI	—
JOB FILE:	INC. ✓

Dear Mr. Shevlin:

We have reviewed the draft report and would request that the following comments be addressed:

1. Reference (one paragraph) within Introduction/Overview should be made to RIDOT and URITC bike path user survey project in ALL FINAL site assessment documents.
2. Cover page – please label this document and all others as DRAFT.
3. When referring to the abandoned rail line, it is called the “Warwick Industrial Track”. Please correct throughout the document
4. All pages; align paragraphs
5. All pages; change “shared-use path” to “bike path”
6. Pg. 1 There appears to be confusion regarding the limits of the South Elmwood Spur and Pontiac Secondary corridors. For example, on page 1 it describes, “total rail corridor, including both the South Elmwood and Pontiac Secondary Rail Lines in Cranston, is approximately 10’ wide and 4 ½ miles long.” These are two separate, distinct project areas. While there are opportunities to link the two, they are to be treated separately during this study. This should be corrected throughout the document. Also, we’re not sure what the “10’ wide” is referring to. The right-of-way width is much larger (approximately 80 feet) and a future path would be 12 feet at a minimum.

7. Pg. 3 correct spelling of AMTRAK.
8. Pg. 4 4<sup>th</sup> paragraph; rephrase context of sentence beginning with, "In order to...."
9. Pg. 4 5<sup>th</sup> paragraph; change text to, " the proposed bike path would continue on the abandoned wooden trestle through a mix of residential and industrial sites.
10. Pg. 6 Figure1- label Pawtuxet River
11. Pg. 6 Figure 1 entitled South Elmwood Spur, shows the Pontiac Secondary also. The figure should show South Elmwood with connection points to the Pontiac.
12. Pg. 7 Figure 2 same comments as noted above, What is the difference between Figure 1 and Figure 2?
13. Pg. 10 1<sup>st</sup> paragraph; delete sentence beginning with "Bike lanes increase the total....."
14. Pg. 10 3<sup>rd</sup> paragraph; delete "and give priority to bicyclists." Delete entire sentence; "Once a route has been signed it means....." Delete entire sentence; "Maintenance of the route will be at a higher standard than ..."
15. Pg. 11 Figure 4 Insert graphic with better text quality.
16. Pg. 12 2<sup>nd</sup> paragraph; delete "will be" to "should be"
17. Pg. 12 2<sup>nd</sup> paragraph; Correct spelling of "us" to "such"
18. Pg. 12 2<sup>nd</sup> paragraph; Change text to "The MUTCD provides regulatory sign standards and markings.
19. Pg. 15 Incorporate language that an arrangement could be made with a future developer of the Ciba-Giegy property to extend path over the Pawtuxet River and into the Belmont Park area of Warwick.
20. Pg. 23 Last sentence; appears confusing, if constructed, would Pontiac Secondary on road bike route use directional signage of Cranston Cross-city bike path?
21. Pg. 24 Please verify that this area at the Well Avenue railroad bridge is on AMTRAK property. It may be part of RIDOT-owned Pontiac Secondary (State Highway Plat 2411).

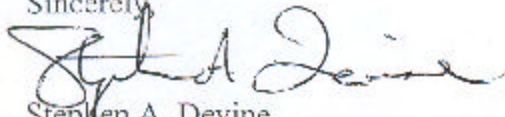


Mr. John Shevlin, P.E.  
South Elmwood Spar  
12/01/2003  
Page 3 of 3

22. Attached us a marked-up draft report with additional comments.

Once these comments have been incorporated, we will forward the revised draft report to the City of Cranston for comment.

Sincerely,

A handwritten signature in dark ink, appearing to read "Stephen A. Devine". The signature is fluid and cursive, with the first name "Stephen" and last name "Devine" clearly distinguishable.

Stephen A. Devine  
Chief, Program Development

Attachment  
C/ Messrs., Parker, Bennett, Church, w/out attachment





STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Rhode Island Department of Transportation  
ENVIRONMENTAL & INTERMODAL PLANNING  
Two Capitol Hill, Providence, RI 02903-1124  
ENVIRONMENTAL PHONE (401) 222-2023  
INTERMODAL PHONE (401) 222-4203  
FAX (401) 222-2207 TDD (401) 222-4971

February 9, 2004

Mr. John P. Shevlin, P.E.  
Vice President  
Pare Engineering Corporation  
8 Blackstone Valley Place  
Lincoln, RI 02865

Re: South Elmwood Spur  
Pontiac Secondary Bike Path  
RI Contract No. 2002-EI-008  
RI F.A.P. No.: HPP 1827 (003)

RECEIVED PARS	
DATE: 2-9-04	
JOB NO: 02175.0	
COPIES TO	
Civil	
Marketing	
Environmental &	
Planning	
Transportation	<input checked="" type="checkbox"/>
VG	<input checked="" type="checkbox"/>
DT	<input checked="" type="checkbox"/>
JOB FILE: 1	INC. <input checked="" type="checkbox"/>

Dear Mr. Shevlin: *John*

Enclosed are our Highway Engineering Sections comments for the South Elmwood and Pontiac Secondary draft feasibility reports.

We would request that these comments be addressed through a response to comments, and if necessary, incorporated into the draft reports. We will want to review the revised draft reports prior to sending them to the City of Cranston for review.

We have scheduled a meeting for February 20, 2004 at 10:00am in the conference room of the Traffic Operations Center to review the statewide bike route map. We would request that the revised draft reports for South Elmwood and Pontiac Secondary be made available prior to this meeting, so that we may discuss their dissemination to the City.

Sincerely,

*Stephen A. Devine*  
Stephen A. Devine  
Chief, Program Development

Enclosure  
C/ J.M. Bennett, S. Church, w/out enclosures

**Metropolitan Providence Bicycle Facility Site Assessment Project  
South Elmwood Spur & Pontiac Secondary Bike Path  
Design Study Report Comments  
Page 1 of 2**

Proposed South Elmwood Spur

1. This report is very confusing and should not include the proposed Pontiac Secondary Bike Path except only to reference the connection of the two.
2. The figures are confusing as well. They should not include the proposed Pontiac Secondary Bike Path. All figures should stand alone. Therefore, they should have their own legends and show all alternatives discussed in the referenced description.
3. The State does not include buffer items such as trees and fences. This action is left to the property owner. Please remove all reference to this in the report.

Proposed Pontiac Secondary Bike Path

1. Since the South Elmwood Spur has its own report it should be removed from this report and only briefly be referenced at the connection point.
2. All the figures should stand on their own. Therefore, they should contain their own legend. The figures should also be clear and have reference points decreased in size so the routes being discussed are the focal point.
3. Page 3, the second sentence needs more information, "varied and valuable" what is this referring to?
4. Page 5, Paragraph 4, please check the property owners in this discussion.
5. Page 5, Paragraph 5, the report should not make judgement on safety in regards to the Department of Corrections.
6. Have all bridges been discussed with the Bridge Section? Are any of them in the Rehabilitation Program? Can any of them be put in the program?
7. Page 15, Segment 1, all figures should indicate the limits clearly. All alternatives should be shown on the figure. (Page 22)
8. Page 22, Elmwood Avenue is mentioned in the discussion on page 15 in reference to the figure on page 22. It is not shown on the figure.



**Metropolitan Providence Bicycle Facility Site Assessment Project**  
**South Elmwood Spur & Pontiac Secondary Bike Path**  
**Design Study Report Comments**  
**Page 2 of 2**

9. Page 15, the last paragraph is confusing, and may need more description.
10. Page 19, if this is a bicycle project, the bridge work should be minimal, if major bridge work is needed, bridge design should consider placing this in their program.
11. Page 20, Paragraph 6, the State will not be responsible for including buffers in the path plans. Please remove this from all sections of this report.
12. Page 21, the report should indicate some amount of ROW in the discussion.
13. Page 29, any encroachments will be handled by notification and potential legal action (as needed). This should not influence the path route.
14. Page 40, the report should not be making "dangerous environment" statements.
15. The bicycle route should take into account the type and experience of users it will be accommodating for. For example the path should not be a shared use path which turns to a signed route on a busy road. There should be options available.





**ENGINEERING CORPORATION**

8 Blackstone Valley Place  
Lincoln, RI 02865

**Tel: 401-334-4100**

**Fax: 401-334-4108**

TO: RIDOT-Intermodal Planning  
Two Capital Hill  
Providence, RI 02903-1124

**LETTER OF TRANSMITTAL**

DATE: 2/18/2004	JOB NO: 02175.00-002
ATTENTION: <b>Mr. Steve Church</b>	
RE: Metropolitan Providence Bicycle Facility Site Assessment Project-South Elmwood Spur Cranston	

**WE ARE SENDING YOU**

☒ Attached

☐ Under separate cover via \_\_\_\_\_ the following items

☐ Shop drawings

☐ Prints

☐ Plans

☐ Samples

☐ Specifications

☐ Copy of letter

☐ Change order

☒ See Below

COPIES	DATE	NO.	DESCRIPTION
2	2/18/04		Draft Design Study Report
1	2/18/04		Response to Comments - Dec. 1, 2003 Environmental & Intermodal Planning Comments
1	2/18/04		Response to Comments - Feb. 9, 2004 Highway Section Comments

**THESE ARE TRANSMITTED as checked below:**

☐ For approval

☐ Approved as submitted

☐ Resubmit \_\_\_\_\_ copies for approval

☐ For your use

☐ Approved as noted

☐ Submit \_\_\_\_\_ copies for distribution

☒ As requested

☐ Returned for corrections

☐ Return \_\_\_\_\_ corrected prints

☐ For review and comment

☐ \_\_\_\_\_

☐ FOR BIDS DUE

\_\_\_\_\_ 19 \_\_\_\_\_

☐ PRINTS RETURNED AFTER LOAN TO US

**REMARKS:**

Steve,  
Enclosed are two copies of the Draft Design Study Report for the South Elmwood Spur as you requested, for your review and distribution to the City for their review.  
Diane

COPY TO: \_\_\_\_\_

SIGNED: \_\_\_\_\_

Diane Johnson

If enclosures are not as noted, kindly notify us at once.

RESPONSES TO DRAFT DESIGN STUDY REPORT – HIGHWAY SECTION COMMENTS  
DATED FEBRUARY 9, 2004

**PROPOSED SOUTH ELMWOOD SPUR**

1.     **COMMENT:**       This report is very confusing and should not include the proposed Pontiac Secondary Bike Path except only to reference the connection of the two.

**RESPONSE:**       The report has been rewritten to include only the proposed Pontiac Secondary Bike Path with reference only to the connection of the South Elmwood spur.

2.     **COMMENT:**       The figures are confusing as well. They should not include the proposed Pontiac Secondary Bike Path. All figures should stand alone. Therefore, they should have their own legends and show all alternatives discussed in the referenced description.

**RESPONSE:**       The figures have been revised to now stand alone with their own description and legend.

3.     **COMMENT:**       The State does not include buffer items such as trees and fences. This action is left to the property owner. Please remove all reference to this in the report.

**RESPONSE:**       References made in the report to the State providing buffer items such as trees and fences have been removed from the report.

RESPONSES TO DRAFT DESIGN STUDY REPORT – ENVIROMENTAL & INTERMODAL  
PLANNING COMMENTS DATED DECEMBER 1, 2003

**GENERAL COMMENTS**

1.     **COMMENT:**       Reference (one paragraph) within Introduction/Overview should be made to RIDOT and URITC bike path user survey project in ALL FINAL site assessment documents.

**RESPONSE:**       Reference to the RIDOT & URITC bike path user survey project has been made in the Overview/Introduction section of all the site assessment documents.
2.     **COMMENT:**       Cover Page: Please label this document and all others as DRAFT.

**RESPONSE:**       The Cover page has been labeled as DRAFT DESIGN STUDY REPORT.
3.     **COMMENT:**       When referring to the abandoned rail line, it is called the “Warwick Industrial Track”. Please correct throughout the document.

**RESPONSE:**       The abandoned rail line has been referred to as the “Warwick Industrial Track”.
4.     **COMMENT:**       All pages; align paragraphs.

**RESPONSE:**       Paragraphs have been aligned on all the pages.
5.     **COMMENT:**       All pages: change “shared-use path” to “bike path”.

**RESPONSE:**       January 5, 2004 e-mail correspondence with Steve Church indicate that shared-use path terminology be used instead of bike path.
6.     **COMMENT:**       Pg. 1       There appears to be confusion regarding the limits of the South Elmwood Spur and Pontiac Secondary corridors. For example, on page 1 it describes, “total rail corridor, including both the South Elmwood and Pontiac Secondary Rail Lines in Cranston, is approximately 10’ wide and 4 ½ miles long”. These are two separate distinct project areas. While there are opportunities to link the two, they



RESPONSES TO DRAFT DESIGN STUDY REPORT – ENVIROMENTAL & INTERMODAL  
PLANNING COMMENTS DATED DECEMBER 1, 2003

are to be treated separately during this study. This should be corrected throughout the document. Also, we're not sure what the "10' wide" is referring to. The right-of-way width is much larger (approximately 80 feet) and a future path would be 12 feet at a minimum.

**RESPONSE:** References to the South Elmwood and Pontiac Secondary corridors have been restricted to their individual reports. Clarification was made as to the right-of-way width of the rail corridor being approximately 80 feet.

7. **COMMENT:** Pg. 3 correct spelling of AMTRAK.

**RESPONSE:** The correct spelling has been made.

8. **COMMENT:** Pg. 4 4<sup>th</sup> paragraph; rephrase context of sentence beginning with, "In order to.....".

**RESPONSE:** The paragraph has been rewritten to include the written comments made in the report.

9. **COMMENT:** Pg. 4 5<sup>th</sup> paragraph; change text to, "the proposed bike path would continue on the abandoned wooden trestle through a mix of residential and industrial sites".

**RESPONSE:** The text has been changed to read as written above.

10. **COMMENT:** Pg. 6 Figure 1 – label Pawtuxet River.

**RESPONSE:** Pawtuxet River has been labeled.

11. **COMMENT:** Pg. 6 Figure 1 entitled South Elmwood Spur, shows the Pontiac Secondary also. The figure should show South Elmwood with connection points to the Pontiac.

**RESPONSE:** Figure 1 shows only the South Elmwood Spur information with connection points to the Pontiac Secondary.

RESPONSES TO DRAFT DESIGN STUDY REPORT – ENVIROMENTAL & INTERMODAL  
PLANNING COMMENTS DATED DECEMBER 1, 2003

12. **COMMENT:** Pg. 7 Figure 2 same comments as noted above, What is the difference between Figure 1 and Figure 2?
- RESPONSE:** Figure 2 now shows only the South Elmwood Spur information with connection points to the Pontiac Secondary. The difference between Figure 1 and Figure 2 is that Figure 1 is an Overall Site Plan whereas Figure 2 is a Segment Location Plan, indicating the boundaries of the three segments.
13. **COMMENT:** Pg. 10 1<sup>st</sup> paragraph; delete sentence beginning with “Bike lanes increase the total .....”
- RESPONSE:** This sentence has been deleted.
14. **COMMENT:** Pg. 10 3<sup>rd</sup> paragraph; delete “and give priority to bicyclists”. Delete entire sentence; “Once a route has been signed it means....”. Delete entire sentence; “Maintenance of the route will be at a higher standard than ....”
- RESPONSE:** This sentence has been deleted.
15. **COMMENT:** Pg. 11 Figure 4 – Insert graphic with better text quality.
- RESPONSE:** A graphic with better text quality has been included in all five reports.
16. **COMMENT:** Pg. 12 2<sup>nd</sup> paragraph; delete “will be” to “should be”.
- RESPONSE:** The wording has been changed to read, “should be”.
17. **COMMENT:** Pg. 12 2<sup>nd</sup> paragraph; Correct spelling of “us” to “such”.
- RESPONSE:** The spelling has been corrected.

RESPONSES TO DRAFT DESIGN STUDY REPORT – ENVIROMENTAL & INTERMODAL  
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18. **COMMENT:** Pg. 12 2<sup>nd</sup> paragraph; Change text to “The MUTCD provides regulatory sign standards and markings.”
- RESPONSE:** The text has been changed to read, “The MUTCD provides regulatory sign standards and markings.”
19. **COMMENT:** Pg. 15 Incorporate language that an arrangement could be made with a future developer of the Ciba-Giegy property to extend path over the Pawtuxet River and into the Belmont Park area of Warwick.
- RESPONSE:** The following sentence has been included: “An arrangement should be investigated with the future developer of the Ciba-Giegy property that would allow for the path to extend over the Pawtuxet River and into the Belmont Park area of Warwick.”
20. **COMMENT:** Pg. 23 Last sentence; appears confusing, if constructed, would Pontiac Secondary on road bike route use directional signage of Cranston Cross-city bike path?
- RESPONSE:** Clarification was made in the last sentence that the South Elmwood bicycle facility would become part of the already signed Cranston Cross-City Bike Route at Second Avenue and Elmwood Avenue. Bicyclists riding along the South Elmwood bicycle facility would be directed to the Cranston Cross-City Bike Route until passing under the Wellington Avenue bridge. At that location, the proposed Pontiac Secondary bicycle facility would either go off-road and run parallel to the live AMTRAK rail line or continue on Wellington Avenue along the existing Cranston Cross-City Bike Route until the Well Avenue overpass.
21. **COMMENT:** Page 24 Please verify that this area at the Well Avenue railroad bridge is on AMTRAK property. It may be part of RIDOT-owned Pontiac Secondary (State Highway Plat 2411).
- RESPONSE:** Research continues with RIDOT 's Real Estate Property & Right of Way Department regarding the ownership of the Well Avenue railroad bridge. The Pontiac Secondary Railroad Right-of-Way indicated on Plat No. 2411 does not include the Well Avenue railroad bridge.



RESPONSES TO DRAFT DESIGN STUDY REPORT – ENVIROMENTAL & INTERMODAL  
PLANNING COMMENTS DATED DECEMBER 1, 2003

22. **COMMENT:** Attached us a marked-up draft report with additional comments.

**RESPONSE:** The additional comments made in the attached report have been  
addressed and included in the revised submitted reports.

DJ/mjh

Stephen P. Laffey  
Mayor

Kevin M. Flynn  
Planning Director



**PLANNING COMMISSION**  
Cranston City Hall  
869 Park Avenue Cranston, RI 02910

William R. Guglietta, Esq.  
Chairman

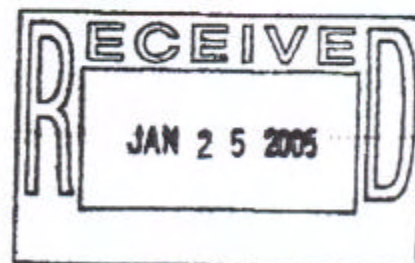
Paul Petit  
Vice-Chairman

Jerome Baron  
Stephen Devine  
Paula B. McFarland  
Charles Rossi  
Marco Schiappa, P.E.

January 21, 2005

J. Michael Bennett, P.E.  
Deputy Chief Engineer  
RIDOT-Environmental & Intermodal Planning  
Two Capitol Hill  
Providence, RI 02903-1124

RE: South Elmwood Spur  
Draft Design Study Report



Dear Mr. Bennett:

I have reviewed the Draft Design Study Report for the Metropolitan Providence Bicycle Facilities Site Assessment Project for the South Elmwood Spur and have the following comments:

**Segment 1** – Under the “Findings” section of the report, on page 15, it states “...the property owner may install fencing and landscaping, such that a buffer would be provided between them and path users.” As part of the development of the Washington Secondary Bike Path, both fencing and landscaping were included as part of the project. Could the same be included here?

**Segment 2** – The plan at the intersection of the bike path with Elmwood Ave. calls for bikers to travel south on Elmwood Ave., in order to connect to the Cranston Cross City Bike Route at Second Ave. This 500' stretch would be designated a Signed Shared Roadway. Given, that though not posted, travel speeds of vehicles are often 35-40 m.p.h along Elmwood Ave., it may be safer to stripe this section as a bike lane. The neighboring area along the 700 foot portion of the Elmwood Spur easterly of Elmwood Ave. would certainly benefit from the cleanup of debris, tires, and discarded appliances along the abandoned rail line. A manually triggered traffic signal should be installed at the Elmwood Ave. crossing for the biker's safety.

A suggested alternative to Segment 2, is to follow the bike path from Mill Street to the intersection of Law Avenue, and to proceed in a southerly direction on Law Avenue, to the intersection of Second Avenue, which is part of the signed Cranston Cross-City Bicycle Network. The biker would then follow that route to the Pontiac Secondary Bike Path. This alternative would eliminate the 500 foot section of Shared

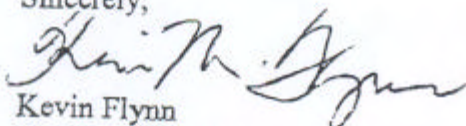
roadway on Elmwood Avenue, and approximately 1,200 feet of Bike Path construction.

**Segment 3** – If Elmwood Avenue is finalized as the designated route, it should be striped for safety reasons. I agree that utilizing the signed Cranston Cross-City Bike Route from Second Avenue is the best way to connect to the Pontiac Secondary Spur, rather than remain on Elmwood to Wellington Avenue.

Elmwood Avenue is not a favored route for bicycle traffic, when there is already a signed alternative.

Thank you for this opportunity to comment.

Sincerely,

  
Kevin Flynn  
Planning Director



February 4, 2005

Mr. Steve Devine, Chief Program Development  
Rhode Island Department of Transportation  
Intermodal Planning  
Two Capitol Hill  
Providence, RI 02903-1124

Attn: Mr. Steve Church

Re: **Metropolitan Providence Bicycle Facility Site Assessment Project**  
**South Elmwood Bike Spur**  
**Contract 2 Various Locations**  
**RI Contract No.: 2002-E1-008**  
PARE No. 02175.00/Task 002

Dear Mr. Devine:

We are pleased to provide to your office response to the comments from the City of Cranston for the Draft Design Study for the proposed South Elmwood Spur project, dated January 21, 2004.

Should you have any questions regarding this submission or if we can be of assistance in any way, please do not hesitate to contact me.

Very truly yours,

John P. Shevlin, P.E.  
Vice President

JPS/VG/DEJ/mjh

RESPONSES TO DRAFT DESIGN STUDY REPORT – CITY OF CRANSTON COMMENTS  
DATED JANUARY 21, 2005

**SOUTH ELMWOOD SPUR**

1. **COMMENT:** **Segment 1** – Under the “Findings” section of the report, on page 15, it states “...the property owner may install fencing and landscaping, such that a buffer would be provided between them and path users.” As part of the development of the Washington Secondary Bike Path, both fencing and landscaping were included as part of the project. Could the same be included here?

**RESPONSE:** The suggestion of installing fencing and landscaping in order to attempt to provide a buffer between the property owner and bike path users would be addressed and coordinated through the Rhode Island Department of Transportation during final design. At that time it would also be determined as to who is ultimately responsible for the installation, maintenance, and ownership of these items.

2. **COMMENT:** **Segment 2** – The plan at the intersection of the bike path with Elmwood Avenue calls for bikers to travel south on Elmwood Avenue, in order to connect to the Cranston Cross City Bike Route at Second Avenue. This 500’ stretch would be designated a Signed Shared Roadway. Given, that though not posted, travel speeds of vehicles are often 35-40 m.p.h. along Elmwood Avenue, it may be safer to stripe this section as a bike lane. The neighboring area along the 700-foot portion of the Elmwood Spur easterly of Elmwood Avenue would certainly benefit from the cleanup of debris, tires and discarded appliances along the abandoned rail line. A manually triggered traffic signal should be installed at the Elmwood Avenue crossing for the biker’s safety.

**RESPONSE:** Elmwood Avenue is a two-lane, two-way roadway with approximate 12-foot travel lanes and 0 to 2 feet striped shoulder widths in each direction. According to AASHTO design criteria, to designate a portion of roadway with striping for Bike Lanes, a minimum of 12-foot travel lanes and 4 feet of shoulder are to be provided. Based on these standards, it is not possible for Elmwood Avenue to be striped as a Bike Lane unless the existing lane configurations are refigured to accommodate these requirements. This, combined with concerns about safety, makes the suggested alternative discussed in Comment number 3 more desirable.

RESPONSES TO DRAFT DESIGN STUDY REPORT – CITY OF CRANSTON COMMENTS  
DATED JANUARY 21, 2005

The cleanup of the 700-foot portion of the Elmwood Spur easterly of Elmwood Avenue is a definite positive benefit as a result of the installation of the South Elmwood Spur in this area.

As stated in the report, the determination of the installation of a manually triggered traffic signal at the Elmwood Avenue crossing would be an integral part of final design, based on the required traffic study and analysis.

3. **COMMENT:** A suggested alternative to Segment 2, is to follow the bike path from Mill Street to the intersection of Law Avenue, and to proceed in a southerly direction on Law Avenue, to the intersection of Second Avenue, which is part of the signed Cranston Cross-City Bicycle Network. The biker would then follow that route to the Pontiac Secondary Bike Path. This alternative would eliminate the 500-foot section of Shared roadway on Elmwood Avenue, and approximately 1,200 feet of Bike Path construction.

**RESPONSE:** This is a viable alternative that would eliminate bicycle traffic on Elmwood Avenue. Elmwood Avenue would still need to be crossed, instead at Second Avenue and a study that involves the investigation of installing a traffic signal would still be warranted.

4. **COMMENT:** **Segment 3** – If Elmwood Avenue is finalized as the designated route, it should be striped for safety reasons. I agree that utilizing the signed Cranston Cross-City Bike Route from Second Avenue is the best way to connect to the Pontiac Secondary Spur, rather than remain on Elmwood to Wellington Avenue.

Elmwood Avenue is not a favored route for bicycle traffic, when there is already a signed alternative.

**RESPONSE:** As indicated in the Response to Comment number 2, a review of the existing conditions along Elmwood Avenue indicate that this route should be eliminated in support of the alternative to Segment 2, as described in Comment number 3.

DEJ/mjh





STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Rhode Island Department of Transportation  
ENVIRONMENTAL & INTERMODAL PLANNING  
Two Capitol Hill, Providence, RI 02903-1124  
ENVIRONMENTAL PHONE (401) 222-2023  
INTERMODAL PHONE (401) 222-4203  
FAX (401) 222-2207 TDD (401) 222-4971

February 8, 2005

Mr. Kevin M. Flynn  
Planning Director  
869 Park Avenue  
Cranston, RI 02910

Re: South Elmwood Bike Path  
Design Study Report

Dear Mr. Flynn: *Kevin*

We have reviewed your comments on the draft Design Study Report (DSR) for the South Elmwood Bike Path and offer the following responses:

- Segment 1 Post and rail fencing was installed on the Cranston Bike Path (Washington Secondary) only in areas of elevation differences or in areas adjacent to vehicles (i.e. parking lots). Post and rail fencing and landscaping is not intended to buffer adjacent properties. The private property owner always has the right to install fencing or landscaping on their property. Landscaping can, and should, be included in the project as a design element to enhance the path itself.
- Segment 2 We agree that Elmwood Avenue is not a good biking route. The alternative you describe is more feasible ending the bike path on the former railroad right-of-way at Law Avenue to Second Avenue thereby connecting with the Cranston Cross-City Bike Route. This avoids putting cyclists on Elmwood Avenue to Wellington Ave.

We have instructed Pare Engineering to revise and submit a Final DSR for this project. It will be incumbent upon the City to endorse the project in order to advance this project further. We will continue to work with the P&W Railroad on possible acquisition of the rail corridor for transportation purposes.

Sincerely, -

*J. Michael Bennett*  
J. Michael Bennett, P.E.  
Deputy Chief Engineer

Enclosure

C/ Edmund T. Parker, Jr., Robert A. Smith, J.M Bennett, Stephen A. Devine, Steven C. Church  
Virgil Gray, Pare Engineering, All, w/out enclosure

RECEIVED PARE	
DATE:	2-11-05
JOB NO:	02175.00
COPIES TO:	
Civil	—
Marketing	—
Environmental & Planning	—
Transportation	✓
VG	✓
RB	✓
DT	✓
JOB FILE:	✓
INC:	✓